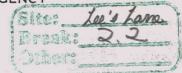
Derek



#### UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

#### REGION IV

345 COURTLAND STREET, N.E. ATLANTA, GEORGIA 30365



#### VIA FEDERAL EXPRESS

Carl Neumayer, Director of Operations and Maintenance
Louisville and Jefferson County Metropolitan Sewer District
400 South Sixth Street
Louisville, Kentucky 40202-2397

October 21, 1992

Re: Lee's Lane Landfill Superfund Site

Dear Mr. Neumayer:

It was a pleasure meeting with you this week concerning the abovementioned Site. Enclosed, as requested, please find copies of Appendices J,K & L to the O & M plan. Could you please copy the topographic maps for Appendix K and send them back? Appendices J and L are yours to keep.

EPA is having some difficulty tracking down the drilling logs for the Zeigler well since this well and the off-Site A and B wells were placed almost five years ago. Specifications for any of the three wells would suffice to make a monitoring well at the Zeigler residence. Until EPA is able to send you something more accurate, enclosed please find two pages from the December 1987 Removal Action Report. These are merely drillers notes on the off-Site wells A and B, but may be of some value to you in initial estimating.

I will contact you when more information becomes available concerning the off-Site ground-water well construction. Please let me know when the dates for gas well and ambient air sampling are finalized. You may contact me or Derek Matory at any time with questions concerning this project.

Sincerely,

Patricia C. Fremont

Remedial Project Manager Kentucky/Tennessee Section

4 Attachments

cc w/o attachments: Rick Hogan, KNREPC



Printed on Recycled Paper

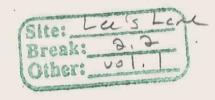
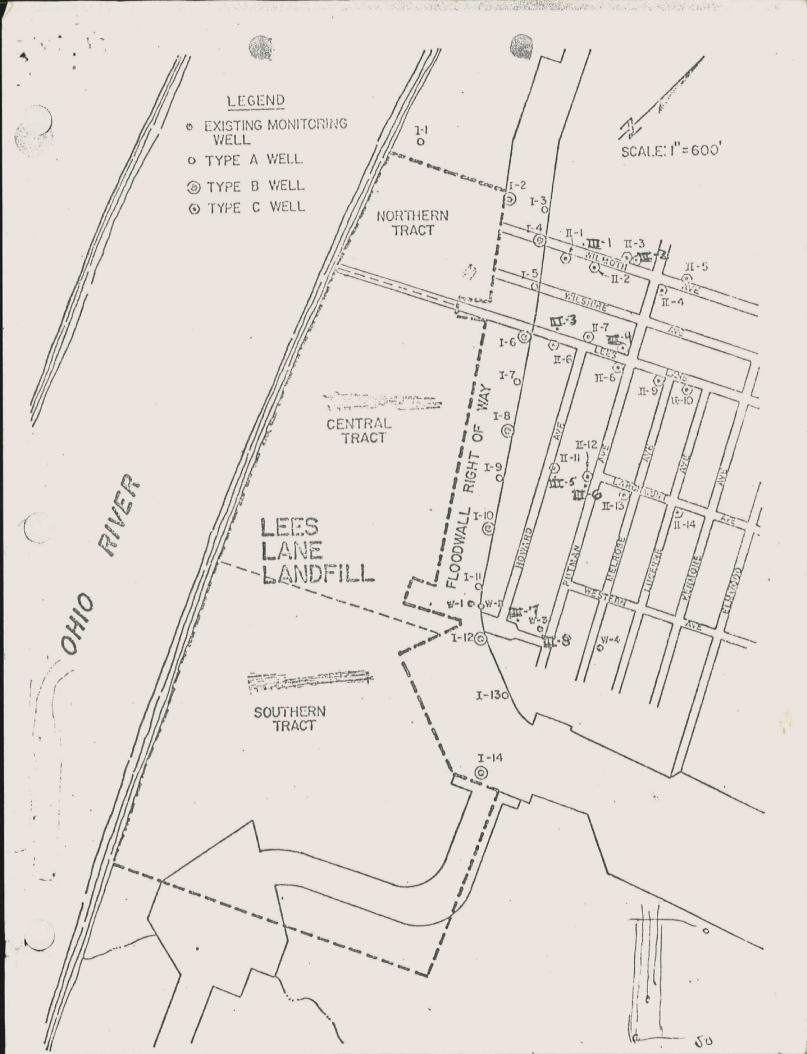


EXHIBIT A Location Plan



#### EXHIBIT B

Field Monitoring Results For Phase I Wells Page 1 of 3

Sampling Date <u>July 20, 1978</u>	
Sampling Personnel J. Walsh,	R. Kinman, S. Nathanson
Time Started 10:45 am	Time Finished 3:00 pm
Weather Conditions Hot with	temperatures in low 90's. Humid.
Sunny.	
Soil Conditions Very dry sinc	e had not rained in several days.
Notes and Observations Press	ure readings were not taken since
manometer and probe valves ha	d not been delivered by supplier.
Gas readings were taken with	a Mine Safety Appliances (MSA) Model
53 Gascope, calibrated speci	fically for methane. In addition to
gas readings shown, readings	were also taken with an MSA Model
2A Explosimeter, calibrated f	for methane. These readings were
taken for quality control and	Explosimeter results corroborated the
Gascope readings.	•



Lower Liver 50%

Experience			Ga	scope		ings	Sample taken	Sample taken for
311 3.	Water Level	Probe No.	Pressure	% LEL	% Gas		for GC Analysis	GC/MS Analysis
1.	-	1A .		. 40	2			
	•	1B		100	26	<b>7</b> 		
		10		100	32			
2	51'-6"			100	72		•	•
		. <b>2</b> B	*	100	72			_
		<b>2</b> C		100	76	<del></del>	***************************************	
3	ps se	3A		100	58			
. •		<b>3</b> B	. •	100	68	<b>-</b> .		gene i generalijatina estitikaskunsat ta
		3C ·		100	68	<del>-</del>		***************************************
4	- 56'-3"	4A		100	. 44	•	•	
7	:	- 4B	•	100	62	<del></del> '		•
		4C		100	66 -	<b>-</b>		-
		EN		:100	. 8	•		
5	** **	5A 5B		100	4	-	*	A STATE OF THE PARTY OF THE PAR
•	•	5C		100			•	-
		:				<u>-</u>		
6	55'-6"	6A		100	.60	_	***************************************	automate in Province
		<b>6</b> B		100	-		•	garlamagar (Salatan Chanal
		бС		100	59	<del>-</del>		•
. 7		7A		100	38	· 		<i>h</i>
•	•	<b>7</b> B		100	58	·		_
	. •	7C		100	58			
8	. 53'-0"		•	100	30		. •	
		8B ·		100	34	٠ .		
		8C		100	32	·.		
:		•	•	-				•

Form No. 1
Page 3 of 3



÷		<del></del>	Ga	scope Readings	Sample taken	Sample taken for
Well	Water	Probe	_	. % %	for GC	GC/MS
No.	Level	No.	Pressure	LEL Gas	Analysis	Analysis
9	. <b></b>	9A	0"	100 12		
		9B		<u> 100 30 - </u>		
		9C		100 30		
	,					
10	50'-8"	10A	1/5"	100 50		
		10B		100 40		· ·
•		100		100 52		
11	==	11A	1/5"	100 45	<del></del>	
		11B		100 54		
		11C		100 55		
		•				
12	51'-0"	12A	3/8"	100 66		
		12B		100 66		
		12C	<u>.</u>	100 66		
13		13A	<u> </u>			
		13B				·
		13C				
		•		<del> </del>		· · · ·
14	42'-8"	14A	0"	00		
		148		40 0	4.5	
		14C		60 0		

			Ga	scope	Readin	gs	Sample taken	Sample
dell No.	Water Level	Probe No:	Pressure	% LEL	% Gas		for GC Analysis	taken for GC/HS Analysis
9		9A		100	26 .	••		
		9B	· <u></u>	100	. 34	-		
		9 <sub>C</sub>		100	34			
10	50'-9"	10A-	***************************************	100	48		***********	
•		10B		100			***************************************	-
		100		100	56	•		
11		11A		100	52 -		•	
	- <b>-</b>	110		100	60		******	<del></del>
		110		100	62			-
••••	. •	,,,					,	-
12	50'-4"	12A ·	•	100	68			
	•	12B		100	70		<del></del>	*
		12C		100	68			
₫ <sup>1</sup>								
13	<b>6</b> - 6-	13A		100	. 40			
		<b>1</b> 3B		100	56	•	•	
		130		100	56			
						-مر۔	•	
14	(dry)	14A		0	0	•		
		14B		15	0			
		14C		50	6			

Sampling Date August 4, 1978
Sampling Personnel S. Nathanson.
Time Started 9:00 a.m. Time Finished 2:00 p.m.
Weather Conditions Cloudy and cool with temperatures around 75°.
Soil Conditions Very wet and muddy.
Notes and Observations Water level and methane gas meter readings were recorded
on the date shown above (August 4, 1978). A return trip was made on August 14, 1978
to collect gas samples for gas chromatograph (GC) analysis. Only six gas samples
were collected since these would be used as a pilot-scale test in determining the
effectiveness of sampling and analytical methodologies. Hereafter, more samples
ill be collected. Pressure readings were again not taken due to the non arrival
of probe fittings and valves. These readings are expected to begin for the next
visit scheduled for August 18. Groundwater levels have risen from one to two feet
in most wells since the last sampling interval.

, ,		. ,							
ιÌ	Untrasa	Probe	Ga	scope %	Readi %	ngs	Sample taken	Sample taken fo	or
	Water Level	No.	Pressure	LEL	Gas		for GC Analysis	GC/MS Analysi	i s
- }	ga. 64	AF		20	0	·	χ		
		18		100	6	•	Χ		-
		10		100	8		X	•	••• •
		••							
2	. 53'-0"	2۸:		100	40		X		_
٠.		. <b>2</b> B		100	40		X		_
		20		100	50	٠.	Χ		
		•					•		
3	<b></b>	3A		100	20				<b></b>
		3B		100	40			-	<b>-</b> -
		3C	-	100	40			• .	
•				. ·				•	
4	. 57'-0"	4A :		100	. 0		•		. · · · · · · · · · · · · · · · · · · ·
	<b>a</b>	4B		100	30		•		
il Hayari		4C	·	100	32.		-		<b></b>
1197		_			•				
5	<b>~</b> -	5A		0_	0		·	•	<u>.</u>
•	. •	5B		100_	0		***************************************	مرسان المرسان	-
•		5C		100	40		*****		
	. •					2.1			•
6	56'-8"	_		100	30	_	4 ************	•	<del></del>
		<b>6</b> B		100	32.				_
		6C		100		-		<del></del>	<del>-</del>
			•	0.4	•	•		<u>.</u>	•
7		7A		34	0	-		<u></u>	<b>-</b> .
	•	7B .		100	18	-	***************************************		- ·
D.	· •	7C		100	48		***************************************		-
8	. 541-0	" 8A		100	0				
•		8B		100	. 6	<del>-</del> ·	<del></del>		
م م	•	8C		100	8	• .	•		`
			* * * * * * * * * * * * * * * * * * *	٠.	•	<del>-</del>			
	•								

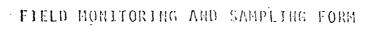
			Ga	scope	Read	ings	Sample taken	Sample taken for
Well No.	Water Level	Probe No.	Pressure	% LEL	% Gas		for GC Analysis	GC/MS Analysis
9	give Sim	9A		0	0 .			
•		9 B		100	0	• .		
,	·	90		100	26			
10	511-6"	10A.		100	22			
		108		0	0	<del></del>		
		100		100	30			
11	<b>60 PP</b>	11A	·	0	0			
		118		100	20	~	<del></del>	guanagadagan da angaran an angaran
		110		100	22			
12	51'-4"	12A	•	100	60			·
		12B		100	60			
		120	4	100	52			
13.	<b>4</b> 00 <b>4</b> 00	<b>1</b> 3A		100	46			
•••		13B		100	60	<del></del>		
		130		100	56			
14	43'-0"	14A		0	0			and the second s
		14B	*****		0	<del></del>	<u> </u>	
		14C		2	0_	~		

Sampling DateAugust 18, 1978
Sampling Personnel S. Nathanson
Time Started 8:30 a.m. Time Finished 7:30 a.m.
Weather Conditions Sunny and hot with temperatures from 85 to 90°.
Soil Conditions Muddy Standing Water is 2 to 3 inches deep at some well sites.
Notes and Observations
(1) Brass fittings were placed on all 42 of the gas probes.
PVC valves were placed on 25 of the probes. The remaining 17 valves will be
installed at the next visit.
?) PVC well caps were removed in order to accommodate the probes, valves, and
fittings. Cast iron caps over the entire well housing are still in place.
(3) Cast iron well caps for wells 11 and 13 were dislodged from their concrete
implacement. As a result of this condition the cap from well 13 could not
be removed. Therefore, no readings were taken from this well. Materials
and equipment for repair of these two wells will be collected on the next
sampling date or before.
(4) No difficulty was encountered in removing cast iron well caps now that
Teflon tape has been placed on these fittings.

***************************************			Ga	scope	Reading	S	Sample	5;	mple	
'ell	Water Level	Probe No.	Pressure	% LEL	% Gas		taken for GC Analysis	(	en for C/MS Lalysis	
1.	t .	14	0"	100	63		X			
		0.B	0"	100	66 .		χ.	-		
	•	10	0"	100	69		X			
	• • •	• •		. =				•		···
2	52'-0"	2A	0"	100	65		Х	_	· · ·	: •
		· 2B	0"	100	_67		Х			
		20	0"	100	62		<u> </u>			
é		•	•		•					•
3	₩ ₩	<b>3</b> A	0"	100	60		<u> </u>			
		3B	•	100	62		X	-		
		3C;	-	100	60 .		<u> </u>			•
•	· .•	•					• .	-	٠.	
4.	56'-6"	4A .	0"	100	. 50	-	. X	-		
	•	48		100	63		<u> </u>	-	<u>.</u>	•
		4C		100	62 .		, <del></del>	-		
		. *							•	
5		5A	<u>0"</u>	50	0		<u> </u>			
		<b>5</b> B	·	100	42		<u>X</u>			
		5C		100	50		<u> </u>	•		•
				٠						
- 6	571	_ 6A	3/8"	100	70					
•		<b>6</b> B ·	3/8"	100	70 .		••	•		
		6C	3/8"	100	67		· <u>·</u>	•		
•		·				•				
7		<b>7</b> A	1/5"	100	42			<u> </u>	<u>.</u>	
	•	<b>7</b> B	3/8"	100	58					
		7C	0	100	55		•			
			. 1	• • • •	٠.				•	
8	(dry)	_ · 8A	1/2"	100	34			<del>-</del> · ·		
		88	•	100	36					
		38		100	30		<del> </del>	<del></del> • • •		•
	•	••	****** <del>=</del>	•	•		•			

		6	Ga	scope	Readings	Sample	Samp Te
Well No.	Water Level	Probe No.	Pressure	% 1.EL	% Gas	taken for GC Analysis	taken for GC/MS Analysis
9		9A	0"	100	12		
		9 B		100	30 -		
		90	And the second s	100	30		
10	50'-8"	1 0 A	1/5"	100	50		
		10B		100	40		
		100	:	100	52	***************************************	-
11	<b></b>	11A	1/5"	100	45		
	•	118	And the second s	100	54		
		<b>]</b> ]C		100	55	Section of the sectio	
12	51'-0"	12A	3/8"	100	66		
•,		12B		100	66		
		120		100	66		-
¶3		13A					
٠,3		13A 13B		·			
		130		<del></del>			
	~	130		<del></del>			
14	421-8"	14A	0"	0	0		•
•		14B		40	0	1. 1-	
		14C		60	0		

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Jampli	ing Date	August 31, 1978		
Sampli	ing Personnel	Steve Nathanson		
Time S	itarted	8:00 a.m.	Time Finished	4:00 p.m.
	•			
Weathe	er Conditions	Sunny and cool wi	th temperatures from	70 to 80° F
<del></del>				
Soil (	Conditions	Wet and muddy.		
<u> </u>				
Notes	and Observat	ions		
(1)	The cast iron	caps and concrete col	lars for wells ll and	1 13 were repaired.
(2)	PVC valves were	e installed on the re	maining 17 probes. A	VII probes have now
	been outfitted	with fittings and va	lves and are ready fo	or pressure readings.
(3)	Two pressure re	eadings were recorded	for each probe. The	e first reading was
	taken when the	valve was first open	ed and thus had the b	penefit of allowing
	pressures to bu	uild up for 2 weeks.	The second reading w	was recorded after the
	probe was allow	ved to release built-	up pressure for about	5 seconds.
. (4)	The samples wh	ich were collected fo	r GC analysis (as sho	own) were actually
•	collected on S	eptember 1.	· · ·	•
(5)	No new problem	s arose on this sampl	ing round.	
		* .		

<del></del>			Ga	scope Readir	igs Sample	Sample
.611	Water	Probe		% %	for GC	taken for GC/MS
<u>).</u>	Level	No.	Pressure	LEL Gas	Analysis	Analysis
1	<b>600 5</b> 00	AF	0"/0"	100 66	X	-
		18	0"/0"	100 63	. X	<u> </u>
•		10	0"/0"	100 60	X	
	•					
2	53'-9"	21	0"/0"	100 74	Х	
		28	0"/0"	100 70	X	
		20 ;	0"/0"	100 70	X	Control of Programme
. •			•		The substituting section is a second section in the second section in the second section is a second section in the second section in the second section is a second section in the second section in the second section is a second section in the second section in the second section is a second section in the second section in the second section is a second section in the second section in the second section is a second section in the second section in the second section is a second section in the second section in the second section is a second section in the second section in the second section is a second section in the second section in the second section is a second section in the second section in the second section is a second section in the second section in the second section is a second section in the second section in the second section is a second section in the second section in the second section is a second section in the second section in the second section is a second section in the second section in the second section is a second section in the second section in the second section is a second section in the section in the second section is a section in the section in the section in the section is a section in the section in the section in the section is a section in the section in the section in the section is a section in the section in the section in the section in the section is a section in the section i	december in the second
3	\$40 mm	<b>3</b> A	0"/0"	100 67	Х	
•		<b>3</b> B	0"/0"	100 68	X	Walter Committee
	. •	<b>3C</b> :	0"/0"	100 66	· X	
•			*			
4	55'-3"	4A .	. 0"/0"	100 . 58	X	. •
•	•	4B	0"/0"	100 66	X	
		4 C	0"/0"	100 66 .	X	
	•		***************************************			<del></del>
. 5	•	5A	0"/0"	0 · 0	X	
,•		<b>5</b> B	0"/0"	100 58	. X	Series of the se
•	•	5C	0"/0"	100 56	X	· desired and a second
٠						
6	56'-0"	6A	0"/0"	100 70	X	
		6B	0"/0"	100 70.		<del> </del>
		6C	0"/0"	100 64		
	•				-	
7		71	0"/0"	100 60	X	ė.
	•	<b>7</b> B	0"/0"	100 58		Control of the contro
		7 C.	0"/0"	100 58	<del>*************************************</del>	
•						
8	(dry)	A8	. 0"/0"	100 34	X	
O	(dry)	_ 8B	0"/0"	100 33		
			0"/0"	100 30	, <u></u>	•
		, 80		100 30		

**.** 

totat mid •			Ga	scope Readings	Sample taken	Sample taken for
11	Water	Probe		% %	for GC	GC/MS
0.	Level	No.	Pressure	I.EL Gas	Analysis	Analysis
9	. <del></del>	9A	0"/0"	100 18	<u> </u>	
		9B	0"/0"	100 30		
-		9C	0"/0"	100 30		
		•				
10	50'-3"	10A	0"/0"	100 58	XX	
		10B	0"/0"	100 59		
		100	0"/0"	100 58		
	•			•		Sandan Sanda
11	<b>₩</b> =•	11A	0"/0"	100 64		
	,	11B	0"/0"	100 58		Secretar and American Implementations
·	. •	110	0"/0"	100 62		•
			•			***
12	51'-6"	12A	0"/0"	100 70	X	
~		12B	0"/0"	100 · 67	-	
	•	12c	0"/0"	100 68		***************************************
13		13A	0"/0"	0 0	X.	,
•		<b>13</b> B	0"/0"	100 70		*
		130	0"/0"	100 60		Andreas and any or a second
·					description with the State of t	
14	(dry)	14A	0"/0"	0 0	X	
		- - 14B	0"/0"			the same same same same
		14C	0"/0"			<del></del>
•		-	0"/0"	0 0 50 10		

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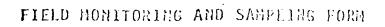
•			Ga	scope	Readi	ng	Sample taken	Sample taken for
3]] :::::::::::::::::::::::::::::::::::	Water Level	Probe	Pressure	2 LEL	% Gas		for GC Analysis	GC/MS Analysis
1	-	1A	0"/0"	100_	60		χ	
		18	0"/0"	100	67	-· .	X	**************************************
		10	0"/0"	100	64	- [	X	•
-				<del></del>		<del>-</del>	<del></del>	Security Commission ( )
2	54"-0"	2A:	0"/0"	100	66		χ .	• •
		2.B	0"/0"	100	60	-	. X	
		2C -	0"/0"	100	62		X	
				<u></u>		<del>-</del> .		
3	<del>-</del>	3A	0"/0"	100	60	_	X	
		<b>3</b> B	0"/0"	100	54	_	X	
		3C-	0"/0"	100	52		<u> </u>	
•	· · ·	÷						
4 .	.55'-1"	_ 4A :	0"/0"	100	· 62	· · ·	<u> </u>	
		4B	0"/0."	100	54		X	
	•	4C	0"/0"	100	64 -	· .	X	
	•				·			· .·
5	<b>~~</b> ⊷	5A	0"/0"	100	20		<u> </u>	
	•	<b>5</b> B	0"/0"	100	40	_	X	
		5C	0."/0."	100	46	_	χ	
•						£ `	· · · · · · · · · · · · · · · · · · ·	•
6	55'-8"	6A	0"/0"	100	72		<u> </u>	***
		<b>6</b> B	0"/0"	100	68.	<b>.</b> .	<u>:-:</u>	
	•	<b>6</b> C	0"/0"	100	66		*****	
	· .						•	, <u>, , , , , , , , , , , , , , , , , , </u>
7 .		7A	0"/0"	100	64		<u> </u>	-
	•	<b>7</b> B .	0"/0."	100	67			And the second s
•		7C	. 0"/0"	100		<del>-</del> .		
•			· On ton	300	20		. <b>v</b>	
8	(dry)	8A	0"/0"	100	30	<u> </u>	<u> </u>	
		88	0"/0"	100	24	<b>-</b> ,		
/	•	.80	0"/0"	100	32	<del></del>	<u></u>	
	•	• • •	· · -		•			•





. •			<u>G</u> ล	scope	Reading	S	Sample taken	Sample	
ell No.	Water Level	Probe No.	Pressure	% LEI.	% Gas		for GC Analysis	taken for GC/MS Analysis	
9	***	9 A	0"/0"	100	20		X		
•		9B	0"/0"	100	25			**	
		9C	0"/0"	100	20				
	•								
10	50'-0"	10A.	C.,\0,	100	60		X		
		<b>10</b> B	0"/0"	100	60				
		10C >	0"/0"	100	60	-			
11		11A	0"/0"	100	66		<u> </u>		
		110	0"/0"	100	50			:	
		110	0"/0"	100	66	•			
•			•	•				•	
12	50'-8"	12A ·	0"/0"	100	68		<u> </u>		
	•	12B	0"/0"	100	66				
		12C	0"/0"	100	60		**************************************		
							•		
13	• • .	13A	0"/0"	0	· 20		<u> </u>		•
		13B	0"/0"	0	60				
		130	<u>, 0"/0"</u>	100	62				
	•			٠		٠,	•	·	
14	(dry)	14A	0"/0"	0	<u>. D.</u>		X	***	
		14B	0"/0"	100	. 0		ļ. ·		
		14C	0"/0"	100	20		<del></del>		
			•						

RCo78
Form Np. 1
Page 1 of 3



Sampling Date 10-3-78 (gas) and 9-28-78 (pressure)	
Sampling Personnel Kevin Boyer (Gas) and Steve Nathanson (pressure)	
Time Started 10:00 /M Time Finished 3:00 PM	
Weather Conditions Cloudy, rain on and off all day. Temperature about 70°F.	
	-
Soil Conditions Damp but not muddy	
Notes and Observations Well I-1 was not monitored. Probes A and B in well	
I-3 were full of water which prevented the taking of a gas reading. Some water	
was drawn into the cascoce, but the meter continued to function properly.	
The male adaptor and valve were removed from Probe I-2A for use in sampling	
other probes.	
The first pressure reading shown was taken before pressure release. The second	
reading was taken after the probe was allowed to release built-up pressure.	
	•
	-
oral oral oral most of the most setting the contraction of the contrac	

			C	ascope Readings	Sample taken	Sample taken for
No.	Water Level	Probe	Pressure	% % LEL Gas	for 60 Analysis	GC/MS Analysis
1.		TA	0"/0"	no sample		
•	•	1B	0"/0"	no sample		
•		10	0"/0"	no sample		
	•	•		·		
2	<u> </u>	2/\`	0"/0"	100 83	direct factors of supply and an algorithm and a	
	•	2B	0"/0"	100 84		
	•	20	0"/0"	100 82	a man managamana	g, mysenge // August adversed
•		•		water		
. 3	<b>50 60</b>	3\(\Lambda\)	0"/0"	no sample	***************************************	Burnard Street Street
		3B · ·	. 0"/0"	water no sample	· · · · · · · · · · · · · · · · · · ·	·
		3C.	, 0"/0"	100 72	***************************************	•
•	•			•	•	
4	58'8"	4A	0"/0"	100 . 63		
	•	4B	0"/0"			
	•	4C	0"/0"		•	***************************************
			•	•		
. 5	Cod bus	5A	0"/0"	. 100 14	•	
		<b>5</b> B	0"/0"	100 60	4	
<b>.</b> .		5C	0"/0"	100 64	The wall Exceptions	
•			0"/0"	***		
6	<u> </u>	6A	0"/0"	100 78 high vacuum,		
	•	6B	0"/0"	- no flow, no sampl	e ::	
• • •		6C		100 -75		-
7		7 8	0"/0"	100 68		
. /		7A	0"/0"			-
	•	7B <sub>-</sub> 7C	0"/0"	10066	•	•
	•	76		100 65	*****	-
8	53'9"	8A	· 0"/0"	100 36		
Ų	<u> </u>	<del></del>	0"/0"	100 38		
	•	8B 8C	0"/0"			
		OC 17		100 -32		
•			•		·	



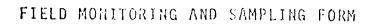
•	errendering der ner i er i ne del	• • •	Ga	scope Readings	Sample taken	Sample taken for
.0.	Water Level	Probe No.	Pressure	% % LEL Gas	for GC Analysis	GC/MS Analysis
ġ	<u>_ `</u>	SA	0"/0"	100 10	,	
		9B	0"/0"	100 35		• •
		9C	0"/0"	100 35		C. Carrier and C. Car
		. ,				
10	52'5"	10A	0"/0"	100 60	-	
		10B	0"/0"	100 57		
	•	100	0"/0"	_10060	§ Sertin Serting Constitution of the Assessment	
	• .		•	•		
11	<b></b>	11A	0"/0"	_10062		
		11B	0"/0"	100 62	· · · · · · · · · · · · · · · · · · ·	-
		110	, 0"/0"	_10060	***************************************	•
	•		. 011 1011		•	
12	52'8"	_ 12A	0"/0"	100 70		· · · · · · · · · · · · · · · · · · ·
	•	12B	0"/0"	100 73	-	-
	•	120		100 73		
13		13A	<b>0"/</b> 0"	100 * 55		
13		13B	0"/0"	100 55		
	· · · · · · · · · · · · · · · · · · ·	13C	0"/0"	100 72	***************************************	
				100 72	<del></del>	
14	(dry)	14A	0"/0"	0 0		
٠.		14B	- 0"/0"	0 0		
		14C	0"/0"	0 0	**************************************	**************************************
	•				***************************************	

Sampling Date October 15, 1978
Sampling Personnel Steven Nathanson
Time Started 8:45 a.m. Time Finished 4 p.m.
Weather Conditions Cloudy and misty with light rain.
Soil Conditions Wet and almost completely saturated.
Notes and Observations No new problems were encountered. Although the wet soil caused immersion of the phase II wells, this did not
appear to be the case with Phase I wells as field readings could be taken at all 42 Phase I probes.

•			Ga	scope Readings	SampTe taken	Sample taken for
%ell No	Water Level	Probe No.	Pressure	% % LEL Gas	for GC Analysis	GC/HS Analysis
1.		14	<u> </u>	100.7 52	X	
		1 B	0"	100 48	X	
		10	0"	100 36	<u>X</u>	to the state of th
2	53'-0"	2A.	0""	100 36	X	-
٠.		28	0"	100 28	<u> </u>	•
		2C .	0"	100 24	<u> </u>	
3	en <del>un</del>	3A	0"	100 41	- <u>X</u>	***************************************
	•	<b>3</b> B	0"	100 38	X	A statement of the state of the
		3C ,	0"	100 40	X	
4	56'-6"	4A •	0"	100 58	. X	
	•	4B	. 0"	100 46		
		4C	0"	100 46		
5	qu Av	5A	0"	100 36	X	
		<b>5</b> B	0"	100 42	•	· Distant Constitution
• .		5C	0"	100 39		
		· .	Section 2 - Control of the Control o			
6	59'~10"	6A	0"	100 58	<u> </u>	
		<b>6</b> B	0''	100 54		-
		6C	0"	100 62		-
7		7A	0"	100 50	X	*\
	•	<b>7</b> B	0"	100 60	Tank and a state of the later o	-
		7C	0"	100 63	•	
8	. 54'-0"	8A	0"	100 52	X	
	. ,	88	0"	100 60		general construction as
	-	80	. 0"	100 58		-

aratromatrico			Ga	scope Readings	Sample taken	Sample taken for
lell llo.	Water Level	Probe No.	Pressure	% % LEL Gas	for GC Analysis	GC/MS Analysis
. 9		9A	<u>O''</u>	100 42	X	
		9B	0''	100 43		
		90	011	100 40	derignant specialistic and the contract	
10	<u>53'-6"</u>	1 0A	0,44	100 52	<u> </u>	****
		108	0"	100 48	P	
		100	. 0"	100 48		g.autohartusharidhili - g
11		11A	0"	100 65	<u> </u>	والمستحددة والمستحدد والمستحد
		118	0"	100 69	***************************************	gth.mphaphaphapha
		110	0"	100 68		
12	521-9"	121	0"	100 70	X	
-		12B	0"	100 72		
		120	0"	100 70	<i></i>	
.13		13A	<u> </u>	100 60	X	And the Control of th
•-		13B	0,,,	100 50		**************
		130	0"	100 59	**	a tagained recovery or
14	42'-9"	14A	04	100 53	X	
٠		14B	0::	100 51	:: :	
		14C	0"	100 63	-	
		and the second second				

Form No. 1
Page 1 of 3



Sampling Date October 21, 1978 -
Sampling Personnel Steven Nathanson
Time Started 8:30 a.m. Time Finished 4:00p.m.
•
Weather Conditions Cool and clear.
Soil Conditions All soil is somewhat wet. Some areas have ponded
water, particularly around some of the wells.
Notes and Observations No new problems were encountered. Some of
the Phase II probes were immersed in water as water was drawn
when the tubes were hand aspirated. However, this problem was not
ncountered at any of the Phase I wells. All Phase II probes were not
immersed in water, and those that did not had negative meter
readings for methane.

, , « 9 .	'	:	ACCOUNT OF THE PROPERTY OF THE				
·	l Water	Probe	<u>G</u> a	scope %	Readings %	Sample takén for GC	Sample taken for GC/MS
	<u>l.evel</u>	No.	Pressure	LËL	Gas	<u> Analysis</u>	Analysis
1.		<b>!</b> A	0"	100	50		
		18	0"	100	52		
•		10	0''	100	48		According to proceedings of the state of
		•			• •		
2	53'-8"	2A*, ,	0"	100	60	-	
٠.		<b>2</b> B	0"	100	64		
		2C	0"	100	69		garanteen en
	• • • • • • • • • • • • • • • • • • • •	•		•			•
. 3	<b>69 to</b> .	3A	0"	100	48		***************************************
		3B ·	0"	100	50	-	
		3C /		100	<u>58</u>	d the transmission of an industrial	
R	E7: 10H	6.0	0"	100	<b>CO</b>		
4	57'-10"	4A 4B	0"	100	65		•
4.***		4C	0"	100	67		guage programmes the self-self-self-self-self-self-self-self-
• } • • •		40		100		***************************************	
5	the MD	5A	0**	100	• 49		
	•	5B	0"	100	58		-
		5C	0"	100	57	-	4.1
• • .					•		
6	60 • - 6 • •	6A	0"	100	65	****	\$ III LEGISLAND CONTRACTOR
		<b>6</b> B	0"	100	67.	1.1.	-
		6C	0"	100	72		
•				•			
7		7A	0"	100	74		
	•	<b>7</b> B	0"	100	70	***************************************	
· .	•	7C	0"	100	68	*	
				•			
8	.54'-8"	8A	0"	100	<u>68</u> .	***************************************	
		88	0"	100	<del>.72</del> .	, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
A. Janear		80	0"	100	_72		

			<u>G</u> a	scope	Readings	Sample taken	Sample taken for
No.	Water Level	Probe No.	Pressure	% LEL	% Gas	for GC Analysis	GC/MS Analysis
9٠	. <b></b>	9Λ.	0".	100	72 -		•
		- 9B	O'#	100	_68		
		90	019	100	70	Production & Vandor - Constituting registered	B affectivity of subjective and second
10	521-10"	10A	0"	100	70	B-1	***************************************
		10B	0"	100	71	,a + <del></del>	
·		100	0"	100	69	- ·	
11	<b>**</b> ***	11A	0"	100	65	•	
		11B	0"	100	54	-	distance or the second of the
		110	· <u>O"</u>	100	45	-	•
*	· . ·		· · · · · · · · · · · · · · · · · · ·				· .
12.	53'-6"	12A	0''	1.00	48		\$100 market 100 market
· ·		12B	. <u>O'f</u>	100	48	\$-11-00-00-00-00-00-00-00-00-00-00-00-00-	\$
		120	0"	100	60	•	
•					•		
13		13A	0"	100	55		g-us
•	•	13B	0"	100	55	6	المني حمدموروسيادر-درسود هددي
	:. • •	130	0"	100	62		
							•
14	43'-0"	14A	0"	100	48		·
•		14B	0"	100	45	<u> </u>	•
		14C	0"	100	46		
	•	•	٠.				

Sampling Date November 1, 1978
Sampling Personnel James Walsh, Steven Nathanson, and Riley Kinman
Time Started 9:00a.m. Time Finished 5:30p.m.
Weather Conditions Clear and cool with temperatures around 60
degrees F.
Soil Conditions Somewhat wet from early morning dew. However.
most of this moisture should have been confined to the surface.
Notes and Observations No new or major problems were encountered.
Polypropylene sample bottles usually used for the collection of
samples for GC analysis were evacuated in the laboratory before
samples were secured in the field. GC samples were then collected
from the "B" probes in all Phase I wells for a total of 14 samples.
In addition, a total of 15 traps were prepared at the University
of Cincinnati in preparation for the collection of samples for
toxic gas analysis. Three traps were then used at each of the "B"
depth probes in Wells I-4, I-6, I-11, III-2, and III -4.

							· ·
•	••	:	G	ascope Readings	Sample taken	taken for	
Well No.	Water Level	Probe No.	Pressure	% % LEL Gas	for GC	GC/HS	
	LUYUI	hu.	11622016	LEL Gas	Analysis	Analysis	
1.	60 96 ·	1A	0"	100 46	······································	•	
•		1 B	0"	100 52	<u> </u>		
		10	0"	100 48			٠.
•		•					
2	Dry at	2۸:	0,,	100 68		-	:
• .	53'-6"	<b>2</b> B	0"	100 62	<u> </u>	Acres of Parket Street	
		2C '	0"	100 65		g uppersymbology electronic grant g	
•		•			• •		
3	E3 #8	3A	0"	100 72	•	·	-
		3B	0"	100 65	X	guardian and a second	
		3C	0"	100 66	de transportation de la company de la co	Section of the second section of the second	
•				•			٠.
4.	58'-0"	4A .	0"	100 · 58	-	-	
	•••••••••••••••••••••••••••••••••••••••	4B	0"	100 58	X	XXX	
		4C	0,0	100 68		-	
	•		•	•			
5	too dies	5A .	0::	100 52		· · · · · · · · · · · · · · · · · · ·	
. •	•	<b>5</b> B	0"	100 57	X		
		5C	0"	100 55		-	
			**				·• .
6	60"-6"	6A	019	100 69	والمراجعة المحاجمة المحاجمة والمحاجمة والمحاجم	***************************************	• •
		6B	0"	100 55	<u> </u>	XXX	
	• .	6C ·	0"	100 63		Secretary and the Second	
	•					<b>X</b>	
7		7A	. 0"	100 67		-	
	•	7B	0"	100 72	<u> </u>		
	•	7 C	0"	100 74			
•	•						
. 8	· Dry	81	0''	100 72			-
	•	8B	0''	100 74	X	-	
		8C	. 0.,	100 71	-		
		:		•	•	·.	
				•			





gape with the places often represent to			Ga	scope Readings	Sample taken	Sample taken for
ell	Water	Probe		% %	for GC	GC/MS
No.	l.evel_	<u>Ro.</u>	Pressure	LEL Gas	Analysis	Analysis
9	. •• ••	9A	0"	100 65 .		************
		9B	0"	100 67	X	Automotivation is successful.
		90	0"	100 72		· · · · · · · · · · · · · · · · · · ·
10	Dry	100	0"	100 68		
		10B	0"	100 65	X	Andrews and anti-
		100	0"	100 69	-	garages Philadelican Statements .
11	tre gos	11A	0"	100 62		
	·	118	O;•	100 52	X	XXX
	. "	110	0"	100 56	**************************************	
12.	Dry	12A	0"	100 69	·	
		12B	0"	100 71	X	
		120	0''	100 59		
				• • • •		
13		13A	0"	100 64	•	•
		13B	0"	100 68	<u> X</u>	
		13C	<u>0'''</u>	100 58	•	
1.4	Dry at	14A	0"	100 79		-
	44'-0"	14B	0"	100 68	<u> </u>	
	•	.140	0"	100 72		· ·
	•	· .				

#### EXHIBIT C

Field Monitoring Results
For Phase II Wells

Sampling Date	9-29-78	
Sampling Personnel	Kevin Boyer	,
Time Started	11:00 AM Time Finished 2:00 P.M.	
Weather Conditions	clear, sunny temperature about 80°F	: .
Soil Conditions	Dry	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
	tions <u>Readings were taken with a Bachrach combustible gas</u> on the Jefferson County Health Department. Phase II wells	
		<del></del>

WELL No	),	GASCOPE	READINGS
	<del></del>	% L.E.L.	% GAS
I I-1		0	. 0
11-2		. 0	0
II-3	•	0	<b>. 0</b>
II-4		0	0
11-5	-	0.	0.
II-6		0	. • 0.
II-7	• • •	0	0.
. II-8 ·		0	. 0
11-9.	•	0	0
11-10		0	. 0
[[]]	•	0	0
11-12	•	. 0	. 0
11-13		0	0
11-14		0	0





Sampling Date	10-2-78	<u> </u>	
Sampling Personnel	<u>Kevin Boyer and</u>	d Robert Stearns	
Time Started	7:00 PH	Time Finishe	ed <u>8:00 PM</u>
•	· .		
Weather Conditions	Clear, Cool. Te	emperature about 65 <sup>0</sup>	F
Soil Conditions	Very damp,	not muddy.	
			. 1
Notes and Observati	ons Asmall v	volume of water may	have entered the gascope
while monitoring wel			*
Phase II wells were			
<u> </u>		**************************************	
	<del></del>		
Well No.			
11-1	% L.E.L. Water, no	sample .	
II-2 II-3	0 Water, no	0	<b>.</b>
11-4	water, no	0	
II-5	0	0	
II-6 II-7	0	.0	
11-8	0	0	
II-9 II-10	U Water, no	v sample	
II-ll	0	0	
11-12 11-13	. 0	0	
11-14	Water, no	sample	. •

#### EXHIBIT D

Field Monitoring Results
For Phase III Wells

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Sampling Date <u>oc</u>	tober 25, 1978		
Sampling Personnel	James Walsh		
Time Started 1:	30 p.m.	Time Finished	5:00 p.m.
•			
Weather Conditions	Partly cloudy with	temperatures in	the mid-60's.
Some drizzle had c	ccurred earlier in	the morning. It	had rained two day
préviously.			
Soil Conditions Sl	ightly damb but no	t saturated. No n	onding evident
even around Phase	I vells	anni dia mangan mangangan di mangangan di mangan d	
Notes and Observati	ons		•
			·
		_	
			the state of the s

Well No.	Probe No.	Gascope % LEL	Readings % Gas	Notes
III-1	A B C	100 100 100	51 51 46	
III-2 III-3	A B C A	100 100 100 100	32 32 30 50	
	B C D	100 100 100	54 55 53	
III-4 III-5	A B C A	100 100 100 0	22\ 24 9 0	
rrr-6	B C A B	0 0 92 90	0 0 4 2	
III-7	C A B	87 100 100 100	2 66 67 66	
III-8	A B C	100 100 100 100	14 7 5	
W-1 W-2 W-3 W-4	444 447 549	100 100 100 0	53 51 30	

Sampling Date _	November 1, 1978		
Sampling Personn	nel James Walsh, St	even Nathanson, an	d Riley Kinman
Time Started	9:00 a.m.	Time Finished	6:00 p.m.
•	•		•
Weather Condition	ons Clear and cool	with temperatures	around 60 degrees
	Constitution		
	should be confined		w. However, most of e.
•	ations. Three t Wells III-2 and I		
gas analysis.			
gas analysis.			•
gas analysis.			
gas analysis.			
gas analysis.		•	

Well	Probe	Gascopo	Reading	gs Notes	
No.	No.	% .	%		
*******		LEL	Gas		_
III-1	A	100	. 9		
	В	100	21		
III-2	C A	100 100	36 12		
111-2	B	100	18		
	č	100	15		
III-3	Α	100	48		
	В	100	30		
	C	100	24		٠,
777 A	D	100	34		
111-4	A B	0 100	0 19	•	
	Č	100	17	•	
III-5	Ä	0	Ô	. •	
,	В	0	0		
1-6	C .	0	O	-	
1-6	A _	0	0		
	B C	84 78	5 3		•
III-7	A	100	5 62	· ·	
111-7	В	. 100	.62 63		
	č	1.00	61		
III-8	A	100	26		
	В	100	28		
•	· C	100	16		
W-1	· .	100	12		
W-2		100	64	•	
W-3 W-4	••• .	100 : 0	33		
A & em c.T	••	: 0	<b>U</b>		